

REMARKS

Claims 1-10, 12 and 14-19 are all of the pending claims, with claim 1 being the sole independent claim. By virtue of this Amendment, Applicants cancel claim 11 without prejudice or disclaimer.

I. Drawing Objections:

The Examiner objects to the drawings because they do not show the features recited in claims 10 and 11. Applicants traverse in part and amend in part.

According to claim 10, the plug-in connection apparatus is in the form of a socket, and the mating plug-in connection apparatus corresponds to a connector. These features are illustrated in at least Figs. 4 and 5. For example, in Fig. 4, the mating plug-in connection apparatus is the connector provided on the ribbon lines 14 extending across the modules 13. The connector may be inserted into the plug-in connection apparatus, which is in the form of a socket as shown in Fig. 5. For further clarification, the Examiner's attention is respectfully directed to paragraphs [0034] and [0035] of the instant specification.

As a path of least resistance, Applicants cancel claim 11 to address the Examiner's concerns.

The Examiner also objects to the drawings because the plastic materials shown in Fig. 5 should be illustrated via alternating thick and thin lines. Applicants submit a replacement Fig. 5 implementing the Examiner's helpful suggestions.

II. Claim Objections:

The Examiner objects to claims 1, 10, 11, 12, 17 and 18 for the reasons noted at paragraphs 3-5 of the Office Action. Applicants implement appropriate amendments to address all of the Examiner's concerns.

III. Claim Rejections on Prior Art Grounds:

The Examiner rejects claims 1-8, 10, 11 and 14-18 under 35 USC §102(b) as being anticipated by US 5,486,119 to Nabeshima et al. ("Nabeshima"); and claims 9, 12 and 19 under 35

USC §103(a) as being obvious over Nabeshima. Applicants respectfully traverse all of these rejections in view of the following remarks.

Independent claim 1 recites (among other things) that the locking device includes (1) “a locking element” that mechanically couples the plug-in connection apparatus to the mating plug-in connection apparatus when the locking device is in the lock position, and (2) “an unlocking element” that engages with a mating element on the housing when the locking device is in the unlocked position to retain the locking device in the unlocked position.

An example, non-limiting embodiment of these features is depicted in Fig. 5. Here, the locking device 17 includes a free end with an inwardly protruding projection 18 (or “locking element”) that produces a mechanical coupling between the connector (not shown) and the socket, and an unlocking hook 19 (or “unlocking element”) that engage with a mating element 21 of the housing 16 when the locking device 17 is in the unlocked position. That is, according to claim 1, the “locking element” and the “unlocking element” are separate and distinct components of the locking device that respectively serve separate and distinct functions. The structural and functional details of the elements depicted in Fig. 5 are discussed in the instant specification at paragraphs [0038]-[0041]. At least these features (as recited in claim 1), in combination with the other features recited in claim 1, are not taught or suggested by the prior art relied upon by the Examiner.

The Examiner relies heavily upon Nabeshima to teach each and every feature of the invention defined by claim 1. In so doing, the Examiner relies upon the embodiment depicted in Figs. 11-16 of the reference, and compares the detection pin 11 to the “locking device” defined by claim 1. This rejection position is not convincing for the following reasons.

With reference to Fig. 11 of Nabeshima, the disclosed connector includes a female connector housing 1 and a male connector housing 2. The female connector housing 1 includes a through hole 12 that accommodates the detection pin 11. Turning briefly to Fig. 16, the detection pin 11 includes an insertion piece 15 with a pawl 15b and a convex portion 15c.

The Alleged Unlocked Position

As shown in Fig. 12, the detection pin 11 may be attached to the female connector housing 1 in such a manner that a retaining wall 13 of the female connector housing 1 is captured between the pawl 15b and the convex portion 15c of the insertion piece 15 ... so that the detection pin 11 is prevented from moving (relative to the female connector housing 1) in the upward and downward

directions.¹ In this way, the pawl 15b and the convex portion 15c work in concert together to retain the detection pin 11 in the desire position (compared by the Examiner to the claimed “unlocked position”).

The Alleged Locked Position

Fig. 15 of the reference shows the two connector housings 1, 2 completely fitted together, and the detection pin 11 fully inserted so that the pawl 15b engages with a groove 14a in the male connector housing 2 (compared by the Examiner to the claimed “locked position”).

As demonstrated above, and using the Examiner’s terminology, the “locked” and “unlocked positions” of the detection pin 11 are achieved by the *same component parts* (i.e., the pawl 15b) of the detection pin 11. Certainly then, Nabeshima is not pertinent to “a locking element” and “an unlocking element” that are separate and distinct as required by claim 1. Accordingly, Applicants respectfully request the Examiner to reconsider and withdraw the raised anticipation rejection.

CONCLUSION

Applicants earnestly solicit reconsideration and allowance of all of the pending claims.

Pursuant to 37 C.F.R. §§ 1.17 and 1.136(a), Applicants petitions for a two (2) months extension of time and submit the required \$450.00 extension fee herewith.

The Commissioner is authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

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Enclosures: One (1) Replacement Drawing Sheet

¹ Nabeshima, column 8, lines 52-60.